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10/073,516	02/11/2002	Gregory M. Shreve	200047.00007	5308
21324 7590 10/22/2007 HAHN LOESER & PARKS, LLP One GOJO Plaza Suite 300 AKRON, OH 44311-1076			EXAMINER STOFFREGEN, JOEL	
			ART UNIT 2626	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	Application No. 10/073,516	Applicant(s) SHREVE, GREGORY M.	
	Examiner Joel Stoffregen	Art Unit 2626	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 September 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-38 and 47-60 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-38 and 47-60 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This communication is in response to applicant's amendment filed 01/18/2006. The applicant amended claims 8, 9, 11, 20, 21, 30, 21, 47, 50, 52, 53, and 57-60, and cancelled claims 39-46. Claims 1-38 and 47-60 are currently pending in this application. Claims 1, 20, 30, 47, 48, 50-52, 57, 59, and 60 are independent claims.

#### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. **Claims 50-56** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The intelligent agent is merely a computer program. It is not tangible or functional, and is therefore non-statutory (see MPEP 2106).

#### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. **Claims 30, 35-38, and 48-50** are rejected under 35 U.S.C. 102(b) as being anticipated by WYARD et al. (6,167,398).

6. Regarding **claim 30**, WYARD teaches a document management method comprising:

constructing models ("processes the retrieved reference document to derive four weights", WYARD, column 7, lines 36-37) of a source corpus of documents ("reference corpus can be constituted by two or more documents taken collectively", WYARD, column 7, lines 32-34);

deriving parameters from said models for the operation of an intelligent agent ("the agent 16, processes the retrieved reference document to derive four weights", WYARD, column 7, lines 36-37) over at least one external document repository ("directs the agent 16 to a list of relevant WWW servers", WYARD, column 14, lines 37-38); and

enhancing the source corpus of documents by adding selected documents retrieved by the intelligent agent to form an artificially enhanced corpus ("the reference corpus is combined with at least the search document having the highest relevance level", WYARD, column 13, lines 56-58).

7. Regarding **claim 35**, WYARD further teaches linking the artificially enhanced corpora to at least one other artificially enhanced corpus using a peer-to-peer network ("directs the agent 16 to a list of relevant WWW servers", WYARD, column 14, lines 37-38).

8. Regarding **claim 36**, WYARD further teaches that the intelligent agent adds documents to the artificially enhanced corpus ("the reference corpus is combined with at least the search document having the highest relevance level", WYARD, column 13, lines 56-58) from another artificially enhanced corpus located on the peer-to-peer network ("directs the agent 16 to a list of relevant WWW servers", WYARD, column 14, lines 37-38).

9. Regarding **claim 37**, WYARD further teaches that the external document repository includes the internet ("directs the agent 16 to a list of relevant WWW servers", WYARD, column 14, lines 37-38).

10. Regarding **claim 38**, WYARD further teaches that the external document repository includes other corpora resident on a peer-to-peer network ("directs the agent 16 to a list of relevant WWW servers", WYARD, column 14, lines 37-38).

11. Regarding **claim 48**, WYARD teaches a document management system, in which a document manager is linked to a plurality of unicorpora via a peer-to-peer network ("directs the agent 16 to a list of relevant WWW servers", WYARD, column 14, lines 37-38), the document management system including a method of providing document management services including authoring and translation ("adapted for use in a speech recognition system to provide an LM", WYARD, column 14, lines 5-6) comprising:

receiving a document management request from a unicorpora in the network ("directs the agent 16 to a list of relevant WWW servers", WYARD, column 14, lines 37-38);

programming an intelligent agent with a set of parameters responsive to the request ("the agent 16, processes the retrieved reference document to derive four weights", WYARD, column 7, lines 36-37);

deploying the intelligent agent to search unicorpora in the peer-to-peer network to identify objects responsive to the request ("directs the agent 16 to a list of relevant WWW servers", WYARD, column 14, lines 37-38); and

transmitting the objects to the requesting unicorpus by way of the peer-to-peer network ("agent 16 retrieves a first candidate document", WYARD, column 14, line 41).

12. Regarding **claim 49**, WYARD further teaches assembling the identified objects according to the parameters into a document ("the reference corpus is combined with at least the search document having the highest relevance level", WYARD, column 13, lines 56-58).

13. Regarding **claim 50**, WYARD teaches an intelligent agent in a document management method comprising:

a program containing parameters derived from heuristic models of a source corpus ("the agent 16, processes the retrieved reference document to derive four weights", WYARD, column 7, lines 36-37), wherein said parameters are implemented in

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said program to locate and retrieve documents from external document repositories ("directs the agent 16 to a list of relevant WWW servers", WYARD, column 14, lines 37-38).

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

15. **Claim 51** is rejected under 35 U.S.C. 102(e) as being anticipated by MIZUNO (6,964,011).

16. Regarding **claim 51**, MIZUNO teaches an intelligent agent used in a document management method comprising:

a program including a tagging subroutine operating under parameters ("each document element is held between front and back tags including element names", MIZUNO, column 1, lines 23-24), said parameters causing the program to search a corpus ("each tag position is detected from the structured document", MIZUNO, column 3, lines 38-39) and directing the tagging subroutine to tag language objects within the corpus ("semantic structure of the inputted structured document is detected", MIZUNO, column 3, lines 61-62).

***Claim Rejections - 35 USC § 103***

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. **Claims 1, 31, and 52-60** are rejected under 35 U.S.C. 103(a) as being unpatentable over WYARD et al. (6,167,398) in view of MIZUNO (6,964,011).

19. Regarding **claim 1**, WYARD teaches a method of document management utilizing document corpora comprising:

gathering a source corpus of documents in electronic form ("reference corpus can be constituted by two or more documents taken collectively", WYARD, column 7, lines 32-34);

modeling the source corpus to identify corpus enhancement parameters ("processes the retrieved reference document to derive four weights", WYARD, column 7, lines 36-37);

programming the corpus enhancement parameters into an intelligent agent ("the agent 16, processes the retrieved reference document to derive four weights", WYARD, column 7, lines 36-37); and

using the intelligent agent to search external repositories ("directs the agent 16 to a list of relevant WWW servers", WYARD, column 14, lines 37-38) to find similar terms



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and structures (“dissimilarity metrics will be applied to the candidate document”, WYARD, column 7, lines 39-41), and return them to the source corpora, whereby the source corpus is enhanced to form a unicorpus (“the reference corpus is combined with at least the search document having the highest relevance level”, WYARD, column 13, lines 56-58).

However, WYARD does not disclose modeling the source corpus in terms of document and domain structure information and using a metalanguage to electronically tag the source corpus.

In the same field of document management, MIZUNO teaches:

modeling the source corpus in terms of document (“the physical structure in the document is detected” MIZUNO, column 3, lines 41-42) and domain structure information (“semantic structure of the inputted structured document is detected”, MIZUNO, column 3, lines 61-62); and

using a metalanguage to electronically tag the source corpus (“each document element is held between front and back tags including element names”, MIZUNO, column 1, lines 23-24).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the tags of MIZUNO to derive the weights of WYARD so that the documents have more uniform parameters (see MIZUNO, column 1, lines 31-35).

20. Regarding **claim 31**, WYARD further teaches:

analyzing the artificially enhanced corpus to discover objects useful for at least one task ("processes the retrieved reference document to derive four weights", WYARD, column 7, lines 36-37).

However, WYARD does not disclose tagging the objects within the artificially enhanced corpus to allow for identification, description, and retrieval of the objects.

In the same field of document management, MIZUNO teaches:

tagging the objects within the artificially enhanced corpus to allow for identification, description, and retrieval of the objects ("each document element is held between front and back tags including element names", MIZUNO, column 1, lines 23-24).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the tags of MIZUNO on the weighted documents of WYARD so that the documents have more uniform parameters (see MIZUNO, column 1, lines 31-35).

21. Regarding **claim 52**, WYARD teaches an intelligent agent for searching external corpora comprising:

a processor having search parameters programmed to search external corpora according to the parameters for content ("directs the agent 16 to a list of relevant WWW servers", WYARD, column 14, lines 37-38), and selectively retrieve the content ("agent 16 retrieves a first candidate document", WYARD, column 14, line 41).

However, WYARD does not disclose tagging the content identified in the search.

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In the same field of document management, MIZUNO teaches:

tagging the content identified in the search ("each document element is held between front and back tags including element names", MIZUNO, column 1, lines 23-24).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the tags of MIZUNO on documents of WYARD so that the documents have more uniform parameters (see MIZUNO, column 1, lines 31-35).

22. Regarding **claim 53**, MIZUNO further teaches that the content includes document structures ("the physical structure in the document is detected" MIZUNO, column 3, lines 41-42).

23. Regarding **claim 54**, MIZUNO further teaches that the content includes document models ("semantic structure of the inputted structured document is detected", MIZUNO, column 3, lines 61-62).

24. Regarding **claim 55**, MIZUNO further teaches that the content includes objects ("the physical structure in the document is detected" MIZUNO, column 3, lines 41-42).

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25. Regarding **claim 56**, MIZUNO further teaches that the content includes concepts ("semantic structure of the inputted structured document is detected", MIZUNO, column 3, lines 61-62).

26. Regarding **claim 57**, WYARD teaches computer readable media tangibly embodying a program of instructions executable by a computer to perform a method of enhancing a source corpus in a document management system comprising:

receiving electronic signals representing first parameters regarding the source corpus ("processes the retrieved reference document to derive four weights", WYARD, column 7, lines 36-37); and

searching external document repositories according to the first parameters ("directs the agent 16 to a list of relevant WWW servers", WYARD, column 14, lines 37-38) to identify information in the external document repositories according to the first parameters ("processes the retrieved reference document to derive four weights", WYARD, column 7, lines 36-37).

However, WYARD does not disclose parameters including document structure and document domain information and reporting the tagged information for selective retrieval of the tagged information.

In the same field of document management, MIZUNO teaches parameters including document structure ("the physical structure in the document is detected" MIZUNO, column 3, lines 41-42) and document domain information ("semantic structure of the inputted structured document is detected", MIZUNO, column 3, lines 61-62) and

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reporting the tagged information for selective retrieval of the tagged information ("each tag position is detected from the structured document", MIZUNO, column 3, lines 38-39).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the tags of MIZUNO on documents of WYARD so that the documents have more uniform parameters (see MIZUNO, column 1, lines 31-35).

27. Regarding **claim 58**, WYARD and MIZUNO further teach that the method further comprises:

analyzing the tagged information to create a heuristic model ("processes the retrieved reference document to derive four weights", WYARD, column 7, lines 36-37) defining document domain ("semantic structure of the inputted structured document is detected", MIZUNO, column 3, lines 61-62) and document structure information ("the physical structure in the document is detected" MIZUNO, column 3, lines 41-42) as a second parameter; and

causing electronic signals representing the second parameter to be reported to a document management server to update said first parameters ("processes the retrieved reference document to derive four weights", WYARD, column 7, lines 36-37).

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28. Regarding **claim 59**, WYARD teaches computer readable media tangibly embodying a program of instructions executable by a computer to perform a method of managing documents in a document management system comprising:

constructing heuristic models ("processes the retrieved reference document to derive four weights", WYARD, column 7, lines 36-37) in a source corpus of documents ("reference corpus can be constituted by two or more documents taken collectively", WYARD, column 7, lines 32-34);

using the heuristic models to derive parameters for the operation of an intelligent agent ("the agent 16, processes the retrieved reference document to derive four weights", WYARD, column 7, lines 36-37) over at least one external document repository ("directs the agent 16 to a list of relevant WWW servers", WYARD, column 14, lines 37-38); and

enhancing the source corpus of documents by adding selected documents using the intelligent agent operating under the direction of parameters derived from the heuristic models to form an artificially enhanced corpus ("the reference corpus is combined with at least the search document having the highest relevance level", WYARD, column 13, lines 56-58).

However, WYARD does not disclose models including a domain model and a document structure model.

In the same field of document management, MIZUNO teaches models including a domain model ("semantic structure of the inputted structured document is detected",

MIZUNO, column 3, lines 61-62) and a document structure model ("the physical structure in the document is detected" MIZUNO, column 3, lines 41-42).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the tags of MIZUNO to derive the weights of WYARD so that the documents have more uniform parameters (see MIZUNO, column 1, lines 31-35).

29. Regarding **claim 60**, WYARD teaches a document management system, in which a source corpus is enhanced by the use of an intelligent agent to create an artificially enhanced corpus by a method comprising:

receiving electronic signals for representing a document from the intelligent agent ("processes the retrieved reference document to derive four weights", WYARD, column 7, lines 36-37);

performing heuristic modeling of the source corpora and the received document ("processes the retrieved reference document to derive four weights", WYARD, column 7, lines 36-37); and

sending electronic signals representing search parameters derived from the modeling to the intelligent agent ("the agent 16, processes the retrieved reference document to derive four weights", WYARD, column 7, lines 36-37) requesting another document according to the search parameters ("agent 16 retrieves a first candidate document", WYARD, column 14, line 42).

However, WYARD does not disclose a document including domain and structure information..

In the same field of document management, MIZUNO teaches a document including domain ("semantic structure of the inputted structured document is detected", MIZUNO, column 3, lines 61-62) and structure information ("the physical structure in the document is detected" MIZUNO, column 3, lines 41-42).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the tags of MIZUNO to derive the weights of WYARD so that the documents have more uniform parameters (see MIZUNO, column 1, lines 31-35).

30. **Claims 2-29 and 32-34** are rejected under 35 U.S.C. 103(a) as being unpatentable over WYARD et al. (6,167,398) in view of MIZUNO (6,964,011), and in further view of PETERS et al. (*Across Languages, Across Cultures*).

31. Regarding **claim 2**, WYARD and MIZUNO teach all of the claimed limitations of claim 1. However WYARD and MIZUNO do not disclose replicating the unicorpus in at least one language other than the language of the unicorpus.

In the same field of document management, PETERS teaches replicating the unicorpus in at least one language other than the language of the unicorpus ("translating the entire collections of documents into another language", PETERS, p. 6, section 3.1).



Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to perform the translation of PETERS on the reference corpus of WYARD in order to better “match documents and queries over languages” (PETERS, p. 6, section 3.1).

32. Regarding **claim 3**, PETERS further teaches that unicorpus replication includes translating terms in the unicorpus with a machine dictionary (“full machine translation”, PETERS, p. 6, section 3.1).

33. Regarding **claim 4**, PETERS further teaches that unicorpus replication further comprises performing an analysis of terms surrounding an undefined term to translate the undefined term (“exploit context for disambiguation”, PETERS, p. 6, section 3.1).

34. Regarding **claim 5**, PETERS further teaches that the analysis includes performing a natural language analysis (“exploit context for disambiguation”, PETERS, p. 6, section 3.1).

35. Regarding **claim 6**, PETERS further teaches that the analysis includes a statistical analysis (“observed statistics of term usage”, PETERS, p. 8, section 3.3).

36. Regarding **claim 7**, WYARD and MIZUNO further teach mining the unicorpus (“processes the retrieved reference document to derive four weights”, WYARD, column

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7, lines 36-37), wherein mining includes locating tagged objects within the unicorpus ("each tag position is detected in the structured document", MIZUNO, column 3, lines 38-39).

37. Regarding **claim 8**, MIZUNO further teaches that mining of the unicorpus includes extraction of concept systems ("semantic structure of the inputted structured document is detected", MIZUNO, column 3, lines 61-62).

38. Regarding **claim 9**, MIZUNO further teaches that the extraction of concept systems includes determining semantic relations between individual concepts ("semantic structure of the inputted structured document is detected", MIZUNO, column 3, lines 61-62).

39. Regarding **claim 10**, WYARD and PETERS further teach replicating the unicorpus in at least one other language to form a second unicorpus ("translating the entire collections of documents into another language", PETERS, p. 6, section 3.1), wherein the second unicorpus is mined to obtain useful objects in the other language ("processes the retrieved reference document to derive four weights", WYARD, column 7, lines 36-37).

40. Regarding **claim 11**, WYARD further teaches that the mining is performed selectively to assist in a task ("divides the reference corpus into two portions", WYARD, column 14, lines 18-19).

41. Regarding **claim 12**, WYARD further teaches that said task includes authoring a document ("retained text file 18", WYARD, column 14, line 45).

42. Regarding **claim 13**, WYARD further teaches that said task includes content based searching ("performs information retrieval", WYARD, column 7, lines 15-16).

43. Regarding **claim 14**, WYARD further teaches that said task includes document management ("the reference corpus is combined with at least the search document having the highest relevance level", WYARD, column 13, lines 56-58).

44. Regarding **claim 15**, WYARD further teaches that said task includes content management ("the reference corpus is combined with at least the search document having the highest relevance level", WYARD, column 13, lines 56-58).

45. Regarding **claim 16**, PETERS further teaches that said task includes translation ("translating the entire collections of documents into another language", PETERS, p. 6, section 3.1).

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46. Regarding **claim 17**, PETERS further teaches that said translation includes corpus based machine translation ("full machine translation", PETERS, p. 6, section 3.1).

47. Regarding **claim 18**, WYARD further teaches providing access to the unicorpus over a peer-to-peer network ("directs the agent 16 to a list of relevant WWW servers", WYARD, column 14, lines 37-38).

48. Regarding **claim 19**, WYARD further teaches that at least two unicorpora are connected via the peer-to-peer network, such that sharing of resources occurs between the unicorpora ("directs the agent 16 to a list of relevant WWW servers", WYARD, column 14, lines 37-38).

49. Regarding **claim 20**, WYARD teaches a global documentation method comprising:

modeling a source corpus to determine search parameters ("processes the retrieved reference document to derive four weights", WYARD, column 7, lines 36-37);

providing the search parameters to an intelligent agent ("the agent 16, processes the retrieved reference document to derive four weights", WYARD, column 7, lines 36-37);

enhancing the source corpus by accessing resources outside of the source corpus with the intelligent agent ("directs the agent 16 to a list of relevant WWW

servers", WYARD, column 14, lines 37-38), where said intelligent agent retrieves resources according to the search parameters to create a first unicorpus of documents ("the reference corpus is combined with at least the search document having the highest relevance level", WYARD, column 13, lines 56-58); and

selectively mining at least one unicorpus to perform a selected task ("processes the retrieved reference document to derive four weights", WYARD, column 7, lines 36-37).

However, WYARD does not disclose tagging the modeled source corpus. In the same field of document management, MIZUNO teaches:

tagging the modeled source corpus ("each document element is held between front and back tags including element names", MIZUNO, column 1, lines 23-24).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the tags of MIZUNO to derive the weights of WYARD so that the documents have more uniform parameters (see MIZUNO, column 1, lines 31-35).

However WYARD and MIZUNO do not disclose replicating the unicorpus in at least one other language to form a second unicorpus.

In the same field of document management, PETERS teaches replicating the unicorpus in at least one other language to form a second unicorpus ("translating the entire collections of documents into another language", PETERS, p. 6, section 3.1).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to perform the translation of PETERS on the reference

corpus of WYARD in order to better “match documents and queries over languages” (PETERS, p. 6, section 3.1).

50. Regarding **claim 21**, WYARD further teaches providing access to at least one unicorpus via a shared network (“directs the agent 16 to a list of relevant WWW servers”, WYARD, column 14, lines 37-38).

51. Regarding **claim 22**, WYARD further teaches that said shared network is a peer-to-peer network (“directs the agent 16 to a list of relevant WWW servers”, WYARD, column 14, lines 37-38).

52. Regarding **claim 23**, WYARD further teaches routing documents between unicorpora connected on the peer-to-peer network to a user (“directs the agent 16 to a list of relevant WWW servers”, WYARD, column 14, lines 37-38).

53. Regarding **claim 24**, WYARD further teaches tracking the routing of the documents (“directs the agent 16 to a list of relevant WWW servers”, WYARD, column 14, lines 37-38).

54. Regarding **claim 25**, WYARD further teaches managing rights to the documents routed across the peer-to-peer network (“directs the agent 16 to a list of relevant WWW servers”, WYARD, column 14, lines 37-38).

55. Regarding **claim 26**, PETERS further teaches that the first unicorpus has a plurality of terms wherein replicating includes prepopulating the second unicorpus by using machine translations of at least a portion of said first unicorpus terms ("using both full MT translations and term translations", PETERS, p. 6, section 3.1).

56. Regarding **claim 27**, PETERS further teaches that prepopulating further comprises analyzing the machine translated terms to define remaining terms in the first unicorpus ("exploit context for disambiguation", PETERS, p. 6, section 3.1).

57. Regarding **claim 28**, PETERS further teaches that analyzing includes a statistical analysis of terms adjacent to the untranslated terms ("observed statistics of term usage", PETERS, p. 8, section 3.3).

58. Regarding **claim 29**, PETERS further teaches that analyzing includes performing a natural language analysis of the first unicorpus terms ("exploit context for disambiguation", PETERS, p. 6, section 3.1).

59. Regarding **claim 32**, WYARD and MIZUNO teach all of the claimed limitations of claim 30. However WYARD and MIZUNO do not disclose replicating the artificially enhanced corpus in a second language.

In the same field of document management, PETERS teaches replicating the artificially enhanced corpus in a second language (“translating the entire collections of documents into another language”, PETERS, p. 6, section 3.1).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to perform the translation of PETERS on the reference corpus of WYARD in order to better “match documents and queries over languages” (PETERS, p. 6, section 3.1).

60. Regarding **claim 33**, MIZUNO and PETERS further teach performing cross-linguistic alignment of the second language artificially enhanced corpus and the first artificially enhanced corpus (“documents are aligned”, PETERS, p. 8, section 3.3) and tagging objects within the corpora according to the alignment (“each document element is held between front and back tags including element names”, MIZUNO, column 1, lines 23-24).

61. Regarding **claim 34**, WYARD further teaches prepopulating terminology management and translation memory management components of a computer-assisted translation workstation with the objects tagged in the second language artificially enhanced corpus (“using both full MT translations and term translations”, PETERS, p. 6, section 3.1).



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62. **Claim 47** is rejected under 35 U.S.C. 103(a) as being unpatentable over WYARD et al. (6,167,398) in view of MIZUNO (6,964,011), and in further view of HARTRICK et al. (5,532,920).

63. Regarding **claim 47**, WYARD teaches a document management system operating according to a business method comprising:

providing document management services including translation and authoring services ("adapted for use in a speech recognition system to provide an LM", WYARD, column 14, lines 5-6) over a global information network to a customer ("directs the agent 16 to a list of relevant WWW servers", WYARD, column 14, lines 37-38), where the customer has a source corpus of documents to be managed ("reference corpus can be constituted by two or more documents taken collectively", WYARD, column 7, lines 32-34); and

accessing the source corpus with an intelligent agent to analyze the source corpus ("processes the retrieved reference document to derive four weights", WYARD, column 7, lines 36-37) and identify selected objects within the source corpus ("agent 16 retrieves a first candidate document", WYARD, column 14, line 42), wherein the analysis results in the generation of document parameters programmed into the intelligent agent ("the agent 16, processes the retrieved reference document to derive four weights", WYARD, column 7, lines 36-37) for searching of external document repositories ("directs the agent 16 to a list of relevant WWW servers", WYARD, column 14, lines 37-38), wherein said intelligent agent uses said parameters to identify objects

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of interest in said external document repositories ("agent 16 retrieves a first candidate document", WYARD, column 14, line 42) and selectively retrieve the objects to enhance the source corpus ("the reference corpus is combined with at least the search document having the highest relevance level", WYARD, column 13, lines 56-58).

However, WYARD does not disclose tagging the selected objects with a metatag. In the same field of document management, MIZUNO teaches tagging the selected objects with a metatag ("each document element is held between front and back tags including element names", MIZUNO, column 1, lines 23-24).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the tags of MIZUNO on the documents of WYARD so that the documents have more uniform parameters (see MIZUNO, column 1, lines 31-35).

However WYARD and MIZUNO do not disclose tracking rights in said retrieved objects to determine a royalty payable to an owner of the rights.

In the same field of document management, HARTRICK teaches tracking rights in said retrieved objects to determine a royalty payable to an owner of the rights ("management of copying and printing operations ... so as to comply with royalty payment requirements", HARTRICK, column 1, lines 12-15).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the royalty payments of HARTRICK with the management system of WYARD in order to prevent free copying (see HARTRICK, column 2, lines 64-65).

**Conclusion**


64. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. A list of the pertinent prior art can be found on the included form PTO-892 Notice of References Cited.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joel Stoffregen whose telephone number is (571) 270-1454. The examiner can normally be reached on Monday - Friday, 9:00 a.m. - 6:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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